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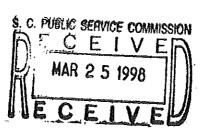
UTILITIES DEPARTMENT

DIRECT TESTIMONY

OF

GENE G. SOULT

ON BEHALF OF



### SOUTH CAROLINA ELECTRIC & GAS COMPANY

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**DOCKET NO. 98-002-E** 

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PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION
WITH SOUTH CAROLINA ELECTRIC AND GAS COMPANY
(SCE&G).

16 **A.** 

Q.

Gene G. Soult, 111 Research Drive, Columbia, South Carolina. I am employed by SCE&G as General Manager of Fossil & Hydro Technical Services.

19 **Q.** 

PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

I have a B. A. S. in Management from Troy State University of Troy, 21 A. Alabama. I was employed by SCE&G in June, 1981, as a Control Room 22 Foreman at V.C. Summer Nuclear Station. In October, 1981 I became a Shift 23 Supervisor at V.C. Summer Nuclear Station and continued to progress through 24 the V.C. Summer management chain to ultimately reside as the General 25 Manager, Nuclear Plant Operations in 1991. In 1992 I assumed the position of 26 General Manager, Quality for SCE&G. In 1993 I assumed the position of 27 Manager, Cope Generating Station and maintained that position through 28

construction, startup and initial commercial operation. In June 1997 I assumed the position of General Manager, Technical Services in the Fossil/Hydro Division of SCE&G. I report to the Vice President of Fossil & Hydro Operations.

#### Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

Q.

A.

A. The purpose of my testimony is to review the operating performance of South Carolina Electric & Gas Company's fossil units and GENCO's Williams Station during the period March 1, 1997, through February 28, 1998.

#### PLEASE SUMMARIZE THE PERFORMANCE OF THE FOSSIL UNITS.

Overall, our fossil units have had a successful operating history in the (12) months period ending on February 28, 1998.

For the period March 1, 1997, through February 28, 1998, the availability for all fossil plants was 84.94%.

Availability is a measure of actual hours that generation units are available compared with the total hours in the period under consideration. Availability is a good indication of overall unit performance by a given plant since it is not affected by how the unit is dispatched or by the demand from the system. National Electric Reliability Counsel ("NERC") averages from 1992 to 1996 for availability from similar sized pulverized coal fired units were 85.50%.

During this period, our fossil plants generated 14,238.2 million megawatt hours of energy which is 70.95% of the total generated by the system, the balance of 23.72% being nuclear and 5.38% being hydro and gas turbine.

# Q. COULD YOU DISCUSS SCE&G'S FORCED OUTAGE RATE FOR THE PERIOD UNDER REVIEW.

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Forced outage rate is the percentage of the total hours that generating units are forced out of service for various reasons compared with the total hours in service and hours forced out during the period considered. SCE&G's system forced outage rate for March 1, 1997, through February 28, 1998, was 2.95%. That is compared to NERC national average forced outage rate of 4.88% for similar sized units. We experienced boiler tube failures at our steam generating stations which did impact our availability and forced outage rates. unavoidable equipment failures did not prevent us from achieving a very favorable operating record for the period. During the Spring of 1997, Wateree Station installed Low Nox burners on unit #1. This outage also included a high pressure and low pressure turbine overhaul. During the Fall 1997 McMeekin Station unit #1 underwent a Low Nox burner installation. An outage began on Urquhart Unit # 3 in January of 1998 to install new Westinghouse Distributive Process Family controls and new Low Nox P2 type burners. This outage also included a high pressure and low pressure turbine overhaul. Wateree Station also started an outage in February 1998 to install Low Nox burners on unit #2 and complete an inspection of the high pressure and low pressure turbine-generator. These two outages are scheduled to be complete in the Spring 1998.

## Q. WHAT HAS BEEN THE HEAT RATE OF THE FOSSIL UNITS DURING THE REVIEW PERIOD?

Heat rate is a way to measure the thermal efficiency of a power plant fuel cycle. It is the number of BTU's of fuel required to generate one (1) kilowatt hour of generation; therefore, the lower the heat rate, the greater the thermal efficiency of the plant.

A.

Q.

A.

For the period March 1, 1997, through February 28, 1998, the overall heat rate for fossil plants in the SCE&G's system was 9767 BTU/KwHr. Cope Station was our most efficient plant posting an overall 9528 BTU/KwHr. heat rate for the period. These are quite good heat rates for these plants and indicate highly efficient operations which means low coal consumption and reduced cost for our customers. We reached a summer peak of 3734 MW's for our system on August 18, 1997, at 5:10 p.m. Power for this peak was produced by the use of our plants which include steam, nuclear, hydro and gas turbines.

# IN OPERATING ITS FOSSIL AND HYDRO PLANTS, HAS SCE&G TAKEN ALL REASONABLE STEPS TO MINIMIZE ITS FUEL COST TO CUSTOMERS?

Yes. We have operated these plants as efficiently and reliably as is reasonably possible. By doing so, we have held our customers' costs, including fuel costs, to a minimum.

We are fortunate that we have had a low forced outage rate and a very low heat rate during this period. But such favorable results will not always be possible. Even with every reasonable effort by the Company to prevent them, equipment problems and human error will cause outages and availability problems from time to time.

The Company will continue to make every reasonable effort to minimize operating problems. But such problems are a normal part of utility operations and are to be expected from time to time. We are very proud of the results we have achieved during the current period but recognize that in the normal course of utility operation, there will be periods where results such as these cannot be reached.

### Q. DOES THIS CONCLUDE YOUR TESTIMONY?

**A**. Yes.